

REMARKS

This is intended as a full and complete response to the Office Action dated September 13, 2006, having a shortened statutory period for response extended one month set to expire on January 13, 2007.

Claims 1-72, and 74-89 remain pending in the application. Claims 1-19, 22, 23, 25, 29-36, 42-45, 49, 52, 56-60 and 63-70 stand rejected by the Examiner. Claims 21, 24, 26-28, 37-41, 46-48, 50, 51, 53-55, 61, and 62 have been withdrawn. Claim 73 has been cancelled by Applicants. Reconsideration of the pending claims is requested for reasons discussed below.

Priority

The Examiner states that the Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. § 120 as follows: the disclosure of the prior-filed application, Application No. 10/618,419, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. § 112.

Applicants respectfully traverse this objection. With respect to lack of support in "the parent case (No. 10/618,419) for the claimed subject matter of an expansion device capable of inducing both a hoop stress and compressive yield within a tubing," paragraph [0008] of the published application (U.S. 2004/0055756) of the parent case 10/618,419 states "the invention may be utilized immediately following the swage-expansion of a tubular...." The swage-expansion causes hoop stress in the tubular. The description includes a rotary expansion tool which causes a compressive yield in the tubular. Thus, Paragraph [0008] discloses the use of both a hoop stress expansion in combination with a compressive yield stress expansion in the tubular. Therefore, Applicants believe the application is entitled to the benefit of the prior application US Application No. 10/618,419, filed July 11, 2003.

Further, the Examiner states that the disclosure of the prior-filed foreign applications, GB 0306774.1 filed March 25, 2003 and GB 0312278.5 filed May 29, 2003, fail to provide adequate support or enablement.

Regarding GB 0306774.1, page 18 at line 19 states an "expansion cone or mandrel may be utilised with an expansion surface adapted for sliding or rolling contact with the tubing wall. . . Alternatively, or in **addition**, a rotary expander may be utilized, that is a device which is rotated within the tubing with at least one expansion member, typically a roller, moving around the surface of the tubing and creating localised compressive yield in the tubing wall. . ." (emphasis added). Thus, the GB 0306774.1 reference discloses the use of a hoop stress expansion in combination with a compressive yield expansion in the tubular. Therefore, Applicants believe they are entitled to the benefit of the prior application GB 0306774.1, filed May 25, 2003.

Regarding GB 0312278.5, page 27 at line 17 states the "expansion device 310 includes a hoop stress inducing expansion portion 320. . . The device also includes a compressive yield inducing expansion tool portion 322. . ." Thus, the GB 0312278.5 reference discloses the use of a hoop stress expansion in combination with a compressive yield expansion in the tubular. Therefore, Applicants believe they are entitled to the benefit of the prior application GB 0312278.5, filed May 29, 2003.

Claim Rejections - 35 U.S.C. § 112

Claims 37 and 38 stand rejected under 35 U.S.C. § 112, second paragraph.

Claims 37 and 38 have been amended to overcome this rejection. Removal of the rejection is requested.

Claim Rejections - 35 U.S.C. § 102

Claims 1-19, 22, 23, 25, 29-36, 42-45, 49, 52, 53, 56-60 and 63-70 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Simpson*, (US 6,457,532).

The Examiner states that *Simpson* discloses an expansion device (300) having an expansion member (116) adapted to expand a tubing by inducing a compressive yield and an expansion member (310) adapted to expand a tubing by inducing a hoop stress in the tubing. It is inherent that the radial forces applied to the tubing by the expansion member (310) to expand the tubing circumferentially will induce a hoop stress in the tubing."

The *Simpson* reference does not disclose an expansion member capable of expanding a tubing by inducing a hoop stress. Rollers expand tubing using compressive yield stress which tends to axially extend the length of the tubing while reducing the wall thickness of the tubing. Rollers cause a series of loaded points, at each roller which tend to push the tubing radially outward at that point. At each roller, a compressive yield of the tubular occurs. The rollers are then rolled around the inner diameter of the tubing to expand the tubing due to the compressive yield stress at each roller. This is opposed to hoop stress in the tubing which is the stress in the tubing wall acting circumferentially in a plane perpendicular to an axis of the tubing. Tubing expanded by inducing hoop stress tends to axially contract the tubing. The conical array of rollers 310, the Examiner has referred to, expands the tubing by inducing a compressive yield stress at each roller. Each of the rollers 310 places a point load on the tubular and then rolls the tubing into shape. The combination of thrust and rotation of the rollers 310, as taught in the reference, is utilized to **roll** the casing to the required shape. It is clear that this rolling does not expand a tube by inducing a hoop stress in the tubing.

Therefore, the *Simpson* reference does not teach, show, or suggest at least one further expansion member adapted to expand the tubing by inducing a compressive yield of the tubing as recited in claims 1-19, 22, 23, 25, 29-38, 42-45, 49, 50, 52, 53, 56-60, and 63-70. Thus, Applicants believe that claims 1-19, 22, 23, 25, 29-38, 42-45, 49, 50, 52, 53, 56-60, and 63-70 are in condition for allowance.

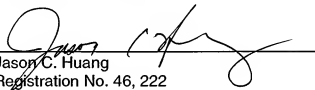
Further, the *Simpson* reference does not teach, show, or suggest expanding the tubing at least in part by inducing a compressive yield of the tubing using at least one further expansion member as recited in claims 71, 72, and 74-89. Thus, Applicants believe that claims 71, 72, and 74-89 are in condition for allowance.

Conclusion

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

Respectfully submitted,



Jason C. Huang
Registration No. 46, 222
PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant